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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,641	07/14/2005	Ole Jan Myhre	0001996/3053USU	3105
27623 7590 03/27/2008 OHLANDT, GREELEY, RUGGIERO & PERLE, LLP ONE LANDMARK SQUARE, 10TH FLOOR STAMFORD, CT 06901				
EXAMINER ZEMEL, IRINA SOPHIA				
ART UNIT 1796		PAPER NUMBER		
MAIL DATE 03/27/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/517,641

**Applicant(s)**

MYHRE ET AL.

**Examiner**

Irina S. Zemel

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 12/12/06;12/9/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of a property limitation range followed by a narrower range limitations of the same property is not appropriate and indefinite.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 6,096,014 to Haffner et al., (hereinafter Haffner")in combination with WO 99/41310 to Borealis Polymer OY, (hereinafter "Borealis '310").

Haffner discloses breathable porous films obtained by polyethylenes filled with high amounts of inorganic filler, such as calcium carbonate. The films disclosed by the Haffner reference are blown films stretched with the stretching ratio of above 3 (see illustrative examples). The films exhibit improved water transmission rate and other

advantageous properties. The reference, while disclosing various polyethylenes, and also expressly disclosing blends of two polyethylenes with very high and very low molecular weights (low and high MFR2, as per illustrative examples), does not disclose use of bimodal polymers.

Borealis '310 disclosed bimodal polyethylene that contain a low molecular weight polyethylene fraction, and a second high molecular weight fraction. The first or low molecular fraction which exhibit MFR2 of above 100 g/10min, and a density of more than 0.960 g/cm<sup>3</sup> (see, for example illustrative example 1, in which the aMFR2 is 410 g/10 min and density is 970 kg/m<sup>3</sup>). The second, high molecular weight fraction, which as per example 1, is copolymer of ethylene with 1-butene, is present in the overall composition in the amount 60 %. (40 % weight of the low molecular weight fraction). The composition exhibit MFR 21 of 20 g/10 min and density of 930 kg/m<sup>3</sup>. The reference further discloses possible ranges of MFR2 of the first fraction, MFR21 of the composition, densities of the first fraction and the composition all of which fully correspond to the claimed properties. (See the entire disclosure, especially "Summary of the invention" portions and illustrative examples). The reference is silent with respect to MFR2 of the composition, and the molecular weight or Mw/Mn, however, since the composition disclosed in the Borealis '310 reference is obtained via the process that is substantially identical to the process described in the instant application (and also claimed in claim 19 of the instant application), it is reasonable believed that the bimodal polyethylene composition disclosed in the Borealis '310 reference inherently exhibit the

properties identical to the claimed properties. The burden is shifted to the applicants to provide factual evidence to the contrary.

The Borealis '310 reference further discloses blown films obtained from the compositions which exhibit exceptionally good properties such as tear strength and yield. The reference further expressly discloses possibility and suitability of adding various fillers, such as chalk (or calcium carbonate).

It would have been obvious for an ordinary artisan to utilize the bi-modal polyethylene composition of Borealis '310 as the starting materials in the production of breathable films disclosed by Heffner since those composition exhibit improved tensile break, yield and modulus properties, the properties highly desired for the production of films of Heffner (see Heffner, table A, for example), and in addition result in homogeneous films.

In the alternative, it would have been obvious to use the amounts of fillers as disclosed in Haffner with the bimodal polyethylene compositions of Borealis '310 for the production of porous films for applications where high water transmission rate of the resulting films is desirable as per teachings of Haffner.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 6,096,014 to Haffner et al., (hereinafter "Haffner") in combination with WO 99/41310 to Borealis Polymer OY, (hereinafter "Borealis '310") as pallied to claim 1 above and further in view of US patent 5,008,296 to Antoon et al., (hereinafter "Antoon")

The disclosure of Haffner and Borealis reference is discussed above. The references, while expressly disclosing possibility of adding various common processing

aids and filler, do not expressly disclose addition of polypropylene (PP) to the polyethylene (compositions). However, it is notoriously known in the art to add PP to polyethylene based composition for number of various reasons, including improved processability of filled polyethylene based composition. This position is supported by teachings of, for example, Antoon. See, for example, column 3, lines 16-21.

The invention as claimed, thus, would have been obvious from the combined teachings of the cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1796

/ Irina S. Zemel/

Primary Examiner, Art Unit 1796

Irina S. Zemel

Primary Examiner

Art Unit 1796

ISZ